DBT Sponsered Two Days National Conference on A Paradigm Shift for Emerging Paraphernalia in Advancement of Cancer Research

28 and 29 Feb-2020

Organized By

Nirmala College of Pharmacy

Affiliated to Kerala University of Health Sciencess Thrrisur
Approved By Government of Kerala, PCI and AICTE
Nirmala College Rd, Kizhakkekara, Muvattupuzha, Kerala 686661

TECHNOLOGY LEADS TO EYE CANCER

Dr. Prasanth Francis*[1], Joel george[2], Jeffin Thomas[3]

Nirmala College of Pharmacy, Muvattupuzha, Ernakulam, Kerala-686661

prasanthfrancis14@gmail.com[1]

Abstract

Objective:To assess the nature and check how technology influences eye and how it leads to Eye cancer Technology now a days play a significant role in eye and and its characteristics.The radiations emitting from newly gadjets (smartphones, computer laptop, mobile phones etc) as blue light rays influence the gene called RB gene(Retinoblastoma Gene) .As this RB gene gets mutated, it will lead to gene mutation and improper translation process. The epidemiological studies states that 80% of students are the victim of uveal melanoma in U.S. Certain factors influence this uveal melanoma like the sitting position of the person while using gadjets, Blinking of eye , Staring at laptops etc. As these blue light rays induces mitotic cell divison and leads to uveal melanoma or Eye cancer. Blue light rays also induces DNA lesions in the gene Suggestion to Improve:The various preventable measures are taken to reduce the incidence of Uveal melanoma. One immediate relevance is the current debate surrounding Intraoccularlens(IOL). These implants are designed to filter out Blue light rays to protect the eye from cancer

Conclusion: In summary the technology is booming in this global and instantly effect the health of human being. Eyes are exposed to certain radiations and induces mitotic cell division. Chemical exposures and radiation in the working place of people has influnced to the Eye Cancer.

Keywords-Uveal melanoma, Technology, Mutation

Corresponding Author: Dr.Prasanth Francis,Professor, Dept of Pharmaceutical Chemistry,Nirmala College of Pharmacy

Email-prasanthfrancis14@gmail.com Mob-9488573217

SIGNIFICANCE OF QUANTIFICATION OF AFLATOXINS IN HERBAL RAW MATERIALS AND FINISHED PRODUCTS

Celu Maria Francis[1]*, Dr. Prasanth B[2]

Nirmala College of Pharmacy, Muvattupuzha

Abstract

In recent times, the use of herbal products has increased in the belief that being natural they are safe and harmless. But unfortunately, herbal drug raw materials (HDRM) are prone to infestations by microorganisms. Aflatoxins are a group of secondary metabolites or mycotoxins produced by fungi such as *Aspergillus flavus* and *Aspergillus parasiticus* which are abundant in warm and humid regions of the world. A quarter of world's food crops are estimated to be affected by mycotoxins creating economical loss. Exposure to higher levels of aflatoxin contamination increases cancer incidence including risk of hepatocellular carcinoma. US Food and Drug Administration (FDA) allows aflatoxin at low levels in nuts, seeds, legumes because they are considered as " unavoidable contaminants". They set maximum allowable levels for aflatoxin in food for direct consumption at 20-300 parts per billion(ppb). Aflatoxins were received by joint FDA/WHO expert committee on food additives in 1987 (WHO 1987). Analytical methods for detection and quantification of aflatoxins B1, B2 (AFB) G1, G2 (AFG) includes TLC, HPLC, mass spectroscopy ELISA, electrochemical immunosensor e.t.c. So assessment of fungal and mycotoxin contaminants should be a part of quality check while selecting HDRM for manufacture of herbal products inorder to ensure the safety.

Keywords: HDRM, Mycotoxins, analytical methods, quality check